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EXAMINER

AUGHENBAUGH, WALTER

ART UNIT

PAPER NUMBER

1772

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/788,351

Applicant(s)

USUI ET AL.

Examiner

Walter B Aughenbaugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because the abstract is not directed to the entire disclosure. The cardboard, which is claimed in claims 4, 6, 12 and 18 is not included. The cardboard is an aspect of the invention and must be included in the abstract. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: "plyolefine" is misspelled on page 24, line 15. Correct to "polyolefin". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is an inconsistency between the specification and the claims. The abstract discloses an interleaf sheet with two surfaces, a surface that “does not contact the coating film” and a “contacting” surface, that have different Bekk smoothness values. However, claims 1-6 address the Bekk smoothness value of the noncontact surface and claims 7-18 address the Bekk smoothness value of the contact surface. Bekk values for both surfaces are not specified together in a single claim. As the claims stand, the invention summarized in the abstract is not claimed. In order to claim the invention disclosed in the abstract, Bekk values must be specified for both noncontact and noncontact surfaces in a single claim.

In regard to claims 1, 2, 7 and 13, no structure is claimed for the packaging material; therefore the scope of the claims cannot be ascertained. The physical shape of the packaging material is not established.

In regard to claims 2 and 13, no structure is claimed for the packaging structure; therefore the scope of the claims cannot be ascertained. The limitation that one surface of the packaging material contacts the imaging surface of the printing plate establishes the relationship between the packaging material and the printing plate but does not establish the physical shape of the package structure.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 7-10, 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al.

Hayashi et al. teach a photothermographic sheet material composed of a support and a sensitive emulsion coated on the support (claim 1 and col. 4, line 45). A sheet of paper having smooth surfaces is inserted between every two sheets of the photothermographic sheet material (claim 1, col. 8) or the sheets of paper and sheets of the photothermographic sheet material are placed alternately (claim 10, col. 9). The paper has a Bekk smoothness of 5 to 10,000 seconds (col. 2, lines 48-54 and claim 2, col. 9). The sensitive emulsion layer and the paper are put in contact with each other in such a way that the paper is in intimate contact with the sensitive emulsion layer (col. 4, lines 55-67). Given that the sheet of paper has “smooth surfaces” (col. 2, lines 40 and 45-47 and claim 1), Examiner interprets the use of the plural form of “surface” to indicate that both surfaces of the sheet of paper have a degree of smoothness as quantified by the stipulated Bekk smoothness range of 5-10,000.

Note that claims 1, 2, 7 and 13 include intended use phrases that are not given patentable weight, since it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQd 1647 (1987).

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The intended use phrases which are not given patentable weight are “for packaging a planographic printing plate” (claims 1 and 7), “is to be fed through an automatic plate-feeding mechanism” (claim 1), “being for contacting the imaging surface of a printing plate when the material is used for packaging the printing plate” (claim 1), “for feeding through an automatic plate feeding mechanism” (claim 2) and “when the material is used for packaging the printing plate” (claims 7 and 13).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 3, 5, 11, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of Usui (US 6,306,254) and in further view of Patent Abstract of Japan 03036545 of Goto et al.

Hayashi et al. teach the material as discussed above and also teaches that the paper has a basis weight of 5 to 200 g/m<sup>2</sup> (col. 3, lines 8-10) and a pH of 3-8 (claim 4, col. 8). Craft paper is

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listed as a suitable paper for use in the invention (col. 2, lines 39-42). Hayashi et al. fail to teach that the sheet has a density of 0.7 to 0.85 g/cc or a moisture of 4% to 6%.

Usui (US 6,306,254) discloses an interleaf paper for protecting a photosensitive printing plate material coated with a water-soluble oxidation preventing layer which enables stabilization of the sensitivity of the photosensitive printing plate material in a short period of time (col. 1, lines 6-10 and col. 2, lines 22-26). An embodiment of the invention is disclosed as an interleaf paper for covering photosensitive printing plate material with a weight of about  $38\text{g/m}^2$ , a density of about  $0.8\text{g/cm}^3$ , and a moisture of about 6.0% that was formed from kraft pulp (col. 2, lines 51-62). A suitable density of interleaf paper for protecting photosensitive printing plate material is thus established by Usui. Therefore, one of ordinary skill in the art would have recognized to have synthesized the sheets of Hayashi et al. with the density specified by Usui in order to provide a paper capable of effectively protecting the printing plate and to enable stabilization of the sensitivity of the photosensitive printing plate material in a short period of time as taught by Usui.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have synthesized the sheets of Hayashi et al. with the density specified by Usui in order to provide a paper capable of effectively protecting the printing plate and to enable stabilization of the sensitivity of the photosensitive printing plate material in a short period of time as taught by Usui.

In regard to the moisture limitation, Patent Abstract of Japan 03036545 of Goto et al. discloses that the moisture content ratio of slip-sheets, which are printing plate packaging materials equivalent to interleaf sheets, is confined to 8% (line 11 of Constitution section, i.e.,

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the moisture content ratio is no more than 8%); consequently, deterioration in visible image formability during packing and storing is thus prevented (Purpose section). One of ordinary skill in the art would have recognized to have limited the moisture content ratio of the sheet of Hayashi et al. to a moisture content ratio of 4-6% in order to prevent deterioration in visible image formability during packing and storing as taught by Patent Abstract of Japan 03036545 of Goto et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have limited the moisture content ratio of the interleaf sheet of Hayashi et al. to a moisture content ratio of 4-6% in order to prevent deterioration in visible image formability during packing and storing as taught by Patent Abstract of Japan 03036545 of Goto et al.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have limited the moisture content ratio of the interleaf sheet of Hayashi et al. to a moisture content ratio of 4-6%, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

9. Claims 4, 6, 12, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of Dirx and in further view of Usui et al. (JP 8-39958).

Hayashi et al. teach the material as discussed above. Hayashi et al. fail to teach that the material is cardboard with a weight of approximately  $640 \text{ g/m}^2$  and a density of approximately  $0.72 \text{ g/cc}$ . Dirx, however, disclose that a sheet of cardboard (Figure 1, item 16) is provided under a stack of photographic plates as a component of a package for photographic plates (col. 3, lines 35-36). The cardboard sheet avoids the occasional cutting of the wrapping foil (Figure 1,



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item 15 and col. 3, line 24) by the edges of the lowermost plate (col. 3, lines 37-38). One of ordinary skill in the art would have recognized to provide a sheet of cardboard under the stack of photothermographic sheets of Hayashi et al. in order to avoid the occasional cutting of the wrapping foil by the edges of the lowermost photothermographic sheet as taught by Dirx.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a sheet of cardboard under the stack of photothermographic sheets of Hayashi et al. in order to avoid the occasional cutting of the wrapping foil by the edges of the lowermost photothermographic sheet as taught by Dirx.

In regard to the cardboard weight basis and density, Usui et al. (JP 8-39958) teach a protection paper cover (Figure 1, item 3) which is placed between every 50 photosensitive sheets (item 1, Figure 1) in a stack of the photosensitive sheets (paragraph 3). The protection paper cover of Usui et al. is equivalent to the cardboard sheet 16 in Figure 1 of Dirx. The bundle of 50 photosensitive sheets sandwiched between protection paper covers are wrapped in interior paper (Figure 1, item 4). The interior paper 4 is equivalent to the wrapping foil 15 of Dirx. Usui et al. discloses an example of the protection paper cover that has a weight basis of 640g/m<sup>2</sup> and a density of 0.72g/cm<sup>3</sup> (paragraph 18 and chart on page 3, Example 1). Usui et al. therefore establish the claimed weight basis and density values of the paperboard material (referred to as cardboard by Dirx and protection paper by Usui et al.) as suitable for paperboard for use as an effective packaging material for photosensitive sheets. Therefore, one of ordinary skill in the art would have recognized to have synthesized the cardboard sheet of Dirx with the weight basis and density specified by Usui et al. in order to provide a paperboard sheet capable of effectively

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avoiding the occasional cutting of the wrapping foil by the edges of the lowermost photothermographic sheet as taught by Dirx.


It would have been obvious to one of ordinary skill in the art at the time the invention was made to have synthesized the cardboard sheet of Dirx with the weight basis and density specified by Usui et al. in order to provide a paperboard sheet capable of effectively avoiding the occasional cutting of the wrapping foil by the edges of the lowermost photothermographic sheet as taught by Dirx.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B Aughenbaugh whose telephone number is 703-305-4511. The examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 703-308-4251. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

wba  
06/26/02

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

6/28/02